

a second layer of a dielectric material, and
a second patterned electrically conductive layer,
wherein the second patterned layer comprises the second capacitor electrode and a first electrode of the integrated circuit, which enables the integrated circuit to be processed on the second layer.

2. A transponder provided with an integrated circuit, an antenna, and a first capacitor provided with a dielectric and a first and a second capacitor electrode, which transponder comprises a stack of layers, i.e.:

a first layer of a dielectric material,
a first patterned electrically conductive layer of which the antenna forms part,
a second layer of a dielectric material,
a second patterned electrically conductive layer,
wherein the second patterned layer comprises the second capacitor electrode and a first electrode of the integrated circuit; wherein,
the first patterned layer comprises the first and a third capacitor electrode,
the second patterned layer comprises a fourth capacitor electrode ,
the third and the fourth capacitor electrodes form a second capacitor in conjunction with the second layer of dielectric material ,
the first capacitor forms a first connection between the integrated circuit and the antenna, and
the second capacitor forms a second connection between the antenna and the integrated circuit.

3. A transponder as claimed in claim 2, wherein the antenna includes the first and the third capacitor electrode.

4. A transponder as claimed in claim 3, wherein the first patterned layer occupies a larger surface area than does the second patterned layer.

5. A transponder provided with an integrated circuit, an antenna, and a first capacitor provided with a dielectric and a first and a second capacitor electrode, which transponder comprises a stack of layers, i.e.:

a first layer of a dielectric material,

a first patterned electrically conductive layer of which the antenna forms part,

a second layer of a dielectric material, and

a second patterned electrically conductive layer,

wherein the second patterned layer comprises the second capacitor electrode and a first electrode of the integrated circuit; wherein the integrated circuit comprises a second electrode; a stack including a semiconducting layer, a third layer of dielectric material, and a third patterned electrically conductive layer that comprises the second electrode of the integrated circuit is present on the second patterned layer; and a fourth layer of dielectric material is present on said stack.

6. A transponder as claimed in claim 5, wherein the semiconducting layer comprises an organic material.

7. A transponder as claimed in claim 5, wherein at least one of the patterned layers comprises a doped organic polymeric material.

8. A transponder as claimed in claim 5, wherein edge zones of the first layer of dielectric material and edge zones of the second layer of dielectric material are adhered to one another, and a substantially uninterrupted protective layer comprising the first and the fourth layer of dielectric material is present.

9. A transponder as claimed in claim 4, wherein the first patterned layer comprises a first contact surface, the second patterned layer comprises a second contact surface, and the first and the second contact surfaces are in contact with each other.